ABSTRACT

Techniques for recovering data transmitted on a physical channel in which the channelization code is not known at the time of the data recovery. A modulated signal is received and processed to provide received samples. A hypothesized channelization code (e.g., an OVSF code in the W-CDMA system) is selected and used to process the received samples to generate partially processed symbols. The hypothesized channelization code is a "base" code that can be used to generate all possible channelization codes that may have been used for the physical channel. Intermediate results representative of the partially processed symbols are stored and, upon determination of the actual channelization code, further processed in accordance with the actual and hypothesized channelization codes to provide the final results. The additional processing includes partitioning the intermediate results into sets, scaling each intermediate result in a particular set with a scaling factor (+1 or -1) determined by the actual and hypothesized channelization codes, and combining the scaled results in each set to obtain a final result. In the STTD mode in the W-CDMA system, the final results from multiple actual OVSF code intervals can be selectively combined to obtain a recovered symbol.

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